

D1  
Cont

negative poles and the negatively polarized surfaces thereof are respectively in contact with the electrodes 28f, 28b, 28d, 28g, i.e., the positive poles.--

IN THE CLAIMS:

Cancel claims 1, 29-33, 37, 38, 45 and 46 without prejudice or admission.

Kindly amend claims 34, 39 and 47 as follows:

D2

34. (Amended) A piezoelectric actuator comprising: a plurality of stacked piezoelectric elements for undergoing expansion/contraction movement to vibrationally drive the piezoelectric elements in accordance with a driving signal applied thereto, each of the piezoelectric elements having the same thickness in a stacking direction of the piezoelectric elements and a length extending in a direction generally perpendicular to the stacking direction, the length of at least one of the piezoelectric elements being equal to the thickness thereof.

D3

39. (Amended) A piezoelectric actuator comprising: a plurality of groups of piezoelectric elements stacked in a stacking direction for undergoing expansion/contraction movement to vibrationally drive the piezoelectric elements in accordance with a driving signal applied thereto, each of the

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groups of piezoelectric elements extending in a longitudinal direction generally perpendicular to the stacking direction, and each piezoelectric element of at least one of the groups of piezoelectric elements having a thickness extending in the stacking direction and a length different from the thickness thereof and extending in the longitudinal direction; wherein the plurality of groups of piezoelectric elements comprises a first group of piezoelectric elements, a second group of piezoelectric elements disposed on the first group of piezoelectric elements and defining the at least one of the groups of piezoelectric elements, a third group of piezoelectric elements disposed on the second group of piezoelectric elements, and a fourth group of piezoelectric elements disposed on the second group of piezoelectric elements.

D4

47. (Amended) A piezoelectric actuator comprising: a cantilever body having a fixed end, a free end opposite the fixed end, a first pair of groups of identical piezoelectric elements, and a second pair of groups of identical piezoelectric elements disposed between the first pair of groups of identical piezoelectric elements, the first and second pairs of groups of identical piezoelectric elements being disposed between the fixed end and the free end for undergoing expansion/contraction movement to vibrationally

D4  
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drive the piezoelectric elements in accordance with a driving signal applied thereto, each of the piezoelectric elements of the first and second pairs of groups of identical piezoelectric elements having the same thickness in a stacking direction of the piezoelectric elements and a length extending in a direction generally perpendicular to the stacking direction, and the length of each piezoelectric element of the first pair of groups of identical piezoelectric elements being one-half the length of each piezoelectric element of the second pair of groups of identical piezoelectric elements.

Kindly add the following new claims 48-57:

D5

48. A piezoelectric actuator comprising: a plurality of piezoelectric elements stacked in a thickness direction thereof for undergoing expansion/contraction movement to vibrationally drive the piezoelectric actuator in accordance with a driving signal applied to the piezoelectric elements, each of the piezoelectric elements having a length extending in a direction generally perpendicular to the stacking direction, and the length of each of at least two of the piezoelectric elements being different from the length of at least one other of the piezoelectric elements.

49. A piezoelectric actuator according to claim 48; wherein each of the piezoelectric elements has the same thickness in the stacking direction.

50. A piezoelectric actuator according to claim 48; wherein the length of each of the least two of the piezoelectric elements is shorter than the length of the at least one other of the piezoelectric elements (so that each of the at least two of the piezoelectric elements undergoes greater expansion/contraction movement than the at least one other of the piezoelectric elements in accordance with a driving signal applied to the piezoelectric elements.)

D5  
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51. A piezoelectric actuator according to claim 48; wherein the piezoelectric actuator is driven in a direction generally perpendicular to the stacking direction in accordance with a driving signal applied to the piezoelectric elements.

52. A piezoelectric actuator comprising: a plurality of groups of piezoelectric elements stacked in thickness direction of the piezoelectric elements for undergoing expansion/contraction movement to vibrationally drive the piezoelectric actuator in accordance with a driving signal applied to the piezoelectric elements of each of the groups of piezoelectric elements, each piezoelectric element of each of the groups of piezoelectric elements having a length extending in a longitudinal direction generally perpendicular to the stacking direction, and the length of the

piezoelectric elements of at least one of the groups of the piezoelectric elements being different from the length of the piezoelectric elements of at least one other of the groups of the piezoelectric elements.

53. A piezoelectric actuator according to claim 52; wherein the piezoelectric elements of each group of piezoelectric elements have the same thickness in the stacking direction.

54. A piezoelectric actuator according to claim 52; wherein the length of each of the piezoelectric elements of the least one of the groups of piezoelectric elements is shorter than the length of the piezoelectric elements of the at least one other of the groups of piezoelectric elements (so that the piezoelectric elements of the least one of the groups of piezoelectric elements undergo greater expansion/contraction movement than the at least one other of the groups of piezoelectric elements in accordance with a driving signal applied to the piezoelectric elements of each of the groups of piezoelectric elements.)

55. A piezoelectric actuator according to claim 52; wherein the piezoelectric actuator is driven in a direction generally perpendicular to the stacking direction in accordance with a driving signal applied to the piezoelectric elements of each of the groups of piezoelectric elements.

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56. A piezoelectric actuator according to claim 52; wherein the plurality of groups of piezoelectric elements comprises a first pair of groups of identical piezoelectric elements and a second pair of groups of identical piezoelectric elements disposed between the first pair of groups of identical piezoelectric elements.

57. A piezoelectric actuator according to claim 56; wherein the length of each of the piezoelectric elements of the second pair of groups of identical piezoelectric elements is greater than the length of each of the piezoelectric elements of the first pair of groups of identical piezoelectric elements (so that the piezoelectric elements of the first pair of groups of identical piezoelectric elements undergo greater expansion/contraction movement than the piezoelectric elements of the second pair of groups of identical piezoelectric elements.)

IN THE ABSTRACT:

Delete the abstract now of record and insert therefor the new abstract submitted herewith on a separate sheet.